

AMENDMENT TO THE CLAIMS

1. (currently amended) ~~An integrated composite base plate and printed circuit board structure for a data storage device comprising:~~

~~a base plate having a first side and a second side, the first side having a patterned surface structure for assembly of a drive motor and head actuator and the second side having a patterned surface including at least one aperture;~~

~~a printed circuit board including at least one raised circuit component elevated from a board portion of the printed circuit board and the at least one raised circuit component extending into the at least one aperture on the second side of the base attached to the base plate and spaced therefrom by a gap; and~~

~~an first adhesive layer portion filling a space between the at least one raised circuit component printed circuit board and the an edge surface of the at least one aperture of the base plate substantially filling the gap and bonding the circuit board and base plate together to form a stiff composite structure for supporting a data storage disc on a drive motor mounted on the base plate.~~

2. (currently amended) The structure according to claim 1 and comprising an adhesive layer between the base and the board portion of the printed circuit board bonding the base to the printed circuit board ~~base plate has an aperture receiving therethrough at least one component mounted on the printed circuit board.~~

3. (currently amended) The structure according to claim 2 wherein the adhesive layer between the base and the board portion forms a first adhesive layer further and comprising a printed circuit board shield fastened to an underside surface of the printed circuit board by a second adhesive layer portion between the printed circuit board and the a shield to connect the shield to the printed circuit board.

4. (currently amended) The structure according to claim 1 wherein the printed circuit board has an upright connector fastened thereto and the first adhesive layer comprising an adhesive portion between the upright connector and an edge surface of ~~bonds the connector to the base plate.~~

5. (currently amended) The structure according to claim ~~3~~1 wherein an overall thickness of the structure is less than 3.3 mm.

6. (currently amended) The structure according to claim 5 wherein the base plate has a portion having a thickness of between 0.2 mm and 0.3 mm.

7. (currently amended) ~~An integrated composite base plate and printed circuit board structure for a disc drive~~data storage device comprising:

a base plate having a patterned surface including a motor hub portion and a head actuator portion;

a printed circuit board including a board portion and at least one component extending from the board portion forming an upright surface of the printed circuit board;  
~~attached to the base plate and spaced therefrom by a gap; and~~

a first adhesive layer portion between the printed circuit board portion and the base and a second adhesive portion between the upright surface of the printed circuit board and an upright surface of the base, ~~plate substantially filling the gap and bonding the circuit board and base plate together to form a stiff composite structure for supporting a data storage disc on a drive motor mounted on the base plate, wherein the disc drive has an overall form factor of a Type I compact flash card.~~

8. (currently amended) The structure according to claim 7 wherein the base plate ~~has an~~includes at least one aperture and the at least one component extending into the at least one aperture to define the upright surface of the base and the upright surface of the printed circuit board receiving therethrough at least one component mounted on the printed circuit board.

9. (currently amended) The structure according to claim ~~27~~ further comprising a printed circuit board shield fastened to an underside surface of the printed circuit board by ~~a second~~another adhesive ~~layer~~portion between the printed circuit board and the shield.

10. (cancelled)

11. (currently amended) The structure according to claim ~~37~~ wherein an overall thickness of the structure is less than 3.3 mm.

12. (currently amended) The structure according to claim ~~511~~ wherein the base ~~plate~~ has a portion having a thickness of between 0.2 mm and 0.3 mm.

13. (currently amended) A structure comprising having:

a base plate for supporting a~~including a disc drive~~ motor hub portion~~and, an actuator in a disc drive comprising~~ portion and at least one aperture; and

a printed circuit board; and

~~a bonding means filling a gap between the base plate and the printed circuit board for fastening the printed circuit board assembly to the base plate and forming a stiff support structure~~

means for reinforcing the at least one aperture of the base to form a stiff support structure.

14. (currently amended) The structure according to claim 13 wherein the ~~bonding means for reinforcing includes~~ is a layer of an adhesive portion filling the at least one aperture between of the base plate and the printed circuit board.

15. (cancelled)

16. (currently amended) The structure according to claim ~~13~~ 14 wherein the base plate has an aperture therethrough and said and comprising a printed circuit board ~~has~~ having at least one component projecting into the at least one aperture of the base and the means for reinforcing comprises an adhesive portion between the at least one component projecting into the at least one aperture of the base and an edge surface of the at least one aperture.

17. (currently amended) The structure according to claim 14 wherein the adhesive portion is an epoxy adhesive.

18. (currently amended) The structure according to claim ~~15~~ 1 wherein ~~said layers are~~ the adhesive portion is an epoxy adhesive ~~layers~~.

Claims 19-20 (cancelled).

21. (new) The composite structure of claim 1 wherein the at least one aperture extends through the base between the first side and the second side of the base.

22. (new) The composite structure of claim 7 wherein the at least one component is a connector and the second adhesive portion is between the upright surface of the base and the connector.

23. (new) The composite structure of claim 13 wherein the at least one aperture extends between opposed side of the base.

24. (new) The structure according to claim 14 wherein the structure further comprises a printed circuit board and comprising a layer of adhesive between the printed circuit board and the base.